FINAL
Finding of No Historic Properties Affected
for the
Issuance of Marine Mineral Leases on the Outer Continental Shelf
Offshore the Commonwealth of the Northern Mariana Islands

Finding

The Bureau of Ocean Energy Management (BOEM) made a Finding of No Historic Properties Affected (Finding) for this undertaking, pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 U.S. Code [U.S.C.] 306108) and 36 Code of Federal Regulations (CFR) § 800.4(d)(l) of the Section 106 implementing regulations, "Protection of Historic Places." Should a mineral lease sale be held, BOEM expects the Finding will be met through inclusion of requirements in leasing documents. These requirements include avoiding known or potential historic properties and ensuring a Qualified Marine Archaeologist (QMA) is allowed to monitor or review live-stream video or recordings and/or samples during certain seafloor disturbing activities. In the event of a discovery or inadvertent effect the Lessee(s) will follow the established unanticipated discovery protocols.

Documentation in Support of the Finding

I. Description of the Undertaking

Summary

This document describes BOEM's compliance with Section 106 NHPA and documents the agency's Finding for the undertaking of issuing up to six marine minerals leases and authorizing associated preliminary activities in the Commonwealth of the Northern Mariana Islands (CNMI) Outer Continental Shelf (OCS). BOEM has prepared this documentation in support of the Finding, following the standards outlined in 36 CFR § 800.11(d) (Documentation Standards). This Finding and supporting documentation has been provided to the consulting parties for the undertaking (see the Consultation with Consulting Parties and the Public Involvement section below). This Finding and supporting documentation were made available for public inspection by placement on BOEM's public website prior to approving the undertaking.

Federal Involvement

The Outer Continental Shelf Lands Act (OCSLA) (43 USC 1331 *et seq.*) mandates the preparation of the OCS mineral leasing program pursuant to 30 CFR Chapter V, Subchapter B. OCSLA and its implementing regulations pertaining to commercial mineral sales and development (30 CFR parts 580-582) encourage orderly, safe, and environmentally responsible development of mineral resources on the OCS. OCSLA was amended (codified at 43 U.S.C. 1331) in the Inflation Reduction Act of 2022 (Pub. L. 117-169) when the definition of "State" was revised to include the Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands.

BOEM is the only Federal agency with the authority to lease marine minerals from the OCS. BOEM's regulatory authority is limited to the OCS, and the bureau cannot approve activities in waters of a U.S. state or territory (from the coastline to the state submerged lands boundary, typically 3 miles offshore), or onshore areas. On March 16, 2026, BOEM's Acting Director signed the Area Identification Memorandum (Area ID) delineating two areas for potentially up to six potential leases. The Area ID does not indicate a final decision on whether, where, or under what circumstances to hold a lease sale; the Area ID delineates potential lease areas for additional analyses as the proposed lease sale process continues. Additional information is provided below (Description of the Proposed Lease Areas) regarding the lease areas.

BOEM prepared an Environmental Assessment (EA) for issuing up to six leases for marine mineral exploration and authorizing associated preliminary activities in the OCS around CMNI, pursuant to 30 CFR 581.14. BOEM has determined that the issuance of these commercial leases and resulting preliminary activities in the lease areas constitute an undertaking subject to Section 106 of the NHPA (54 U.S.C. 306108) (Section 106 NHPA) and its implementing regulations (36 CFR 800). BOEM will serve as the lead federal agency for the Section 106 NHPA review.

Description of the Proposed Lease Areas

Details on the size, depth range, and distances from CNMI and Guam from the lease areas are listed in Table 1. The proposed leases would be within two areas – an eastern area and a western area, encompassing abyssal plains; abyssal hills; active, inactive, and extinct hydrothermal vents; seamounts; and guyots; and partially bordering the Mariana Trench Marine National Monument. The eastern area covers approximately 35,483,044 acres (143,595 km^2), with water depths of 3,700 - 25,100 feet (1,130 - 7,650 meters). It lies about 128 miles (206 km) east of Saipan and 127 mi (205 km) east of Guam.

The western area covers approximately 33,618,369 acres (136,049 km^2), with water depths of 2,820 - 18,670 feet (860 - 5,690 meters). It lies about 57 miles (91 km) west of Saipan and 46 miles (74 km) northwest of Guam.

Table 1. Area, depth range, and distance of the two potential lease areas.

Area	Acres	Square Kilometers	Depth Range	Nearest Saipan Shore Distance	Nearest Guam Shore Distance
Eastern Area	35,483,044	143,595	3,700 - 25,100 ft. (1,130 - 7,650 m)	128 miles (206 km)	127 mi (205 km)
Western Area	33,618,369	136,049	2,820 - 18,670 ft. (860 - 5,690 m)	57 miles (91 km)	46 miles (74 km)

The Undertaking

The undertaking is the potential issuance of up to six marine minerals mining leases within the lease areas. The issuance of a lease allows a Lessee to conduct preliminary activities. "Preliminary activities" are defined as "bathymetric, geological, geophysical, mapping, and other surveys necessary to develop a comprehensive Delineation, Testing, or Mining Plan. Such activities are those which have no significant adverse impact on the natural resources of the OCS (30 CFR 582.21([d])." The commercial lease(s) would not authorize any mining activities on the OCS but could result in preliminary activities.

The EA evaluated the following specific preliminary activities allowed with lease issuance and associated with this undertaking: use of dynamically positioned vessels, autonomous underwater vehicles (AUVs), and remotely operated vehicles (ROVs); high-resolution geophysical (HRG) surveys; high-resolution video or acoustic cameras; sampling sediments, water, and species from an ROV; anchors on the seafloor for buoys and physical or biological data collection; scientific physical and biological monitoring from a ship or moored anchor, including box core sampling and use of landers; expendable equipment such as weights; acoustic doppler current profilers (ADCPs); underwater transponder positioning units; and focused biological surveys from the air, ship, or in-water that can utilize aerial digital imaging, visual observation, radar, thermal or acoustic monitoring.

Preliminary activities that could potentially impact the seafloor include geotechnical investigations (box coring and free fall grab samples), ROV push cores, oceanographic moorings, and deploying scientific equipment on the seabed. Lost equipment is another potential effect that could impact the seafloor because of these preliminary activities.

A Lessee must submit the results of preliminary activities with their plans (Delineation, Testing, and/or Mining Plan) (e.g., 30 CFR 582.22, 30 CFR 582.23, and 30 CFR 582.24). The Lessee shall give written notice to BOEM at least 30 days prior to initiating preliminary activities on the lease. Each written notice must include details of preliminary activities (e.g., bathymetric, geological, geophysical, mapping, and other surveys) to be conducted and timelines of effort.

The following sections provide additional details regarding specific preliminary activities that may be carried out on a lease:

High-Resolution Geophysical Surveys

The purpose of HRG surveys is to acquire seafloor hazards data, characterize seafloor conditions, and conduct bathymetric charting. BOEM anticipates that the HRG surveys would be conducted using the following equipment: bathymetry sounder, multibeam echosounder (MBES), side scan sonar, magnetometer/gradiometer, and possibly sub-bottom profiler, synthetic aperture sonar (SAS), and ultra high-resolution seismic imaging systems. This equipment usually does not contact the seafloor and is typically towed from a moving survey vessel that does not require anchoring. BOEM does not consider HRG surveys to be an activity that has the potential to affect historic properties and therefore is not considered further in this Finding.

Geotechnical Investigations

The purpose of geological sampling during preliminary activities is multifold: to validate (ground truth) HRG surveys, to conduct environmental characterization, to better identify site-specific exploration targets, and to collect information for developing a Delineation, Testing, and/or Mining Plan. Geological and geotechnical surveys include a variety of seabed sampling equipment that cause a range of impacts to the seafloor.

Within the scope of preliminary activities, ROVs provide the most precise method for data and sample collection. ROVs can collect grab and push core samples within centimeters and provide real-time visual control. Instruments that measure conductivity, temperature, and depth; USBL pingers; cameras; and other equipment can also be mounted on an ROV for additional environmental observations. BOEM plans to include as a lease stipulation that a QMA be available to monitor sediment sampling activities conducted via ROV.

Box core and free-fall sampling are preliminary activities considered only for the eastern area. A box core is lowered from a surface vessel to the seabed by winch and penetrates the seabed; when tension is applied, the box core jaws close, sealing the sample inside. Once on deck, various sub-sampling (e.g. grab or scoop) and tests can be performed. A free-fall grab is similar except that it is released unconnected to the vessel, descends to the seafloor, samples the seabed, releases ballast weights, and comes back to the surface via a float. A box core or free-fall grab retrieves a greater sample volume of sediment than an ROV, but preclearance is typically not possible. Additional sensors can also be mounted on a box core or free-fall sampler for additional environmental observations.

On the eastern side of CNMI areas, BOEM assumes up to three seafloor sampling efforts per lease using box cores or free-fall grabs. The initial effort would include sampling and mapping at a coarse scale covering a larger area and then two subsequent sampling surveys would focus on increasingly smaller areas of interest. This assumed approach maximizes the number of surveys and samples; therefore, the document analyses the maximum anticipated environmental impact. The number of surveys and samples, and area are estimated from research-based activities, U.S. agency research, and 2023 ISA guidance with details available in Appendices A and E of the EA. The International Seabed Authority's (ISA) deep data website (International Seabed Authority 2025) shows that sampling grids sometimes are not constant throughout a lease. Table 2 contains the estimated range of seabed box core and free-fall grab sample stations in the eastern area; however, the values in Table 2 assume a consistent survey density and a greater-than-average number of samples for ISA exploration contracts. The undertaking includes multiple sampling surveys on the eastern area, collecting approximately 2,550 samples. Table 3 shows the estimated area of disturbance to the seafloor caused by box core and free-fall grab surveys in the eastern area. Each sample could disturb an area of 0.5 to 1.5 m^2 of the seafloor. Together, multiple sampling surveys could disturb 2,265 m^2 of the seafloor and represent less than 0.0000016% of the total eastern area.

For the leases in the eastern area, BOEM expects four main surveys: one mapping HRG survey from a ship, and three subsequent surveys (increasingly fine-scale) utilizing AUVs, box cores, and/or free-fall samplers. Several oceanography cruises also may be conducted. For the leases in the western area, BOEM expects three main types of surveys: mapping and chemical

oceanography, AUV, and ROV. For mapping, HRG survey activities would be similar to leases in the eastern area, with the addition of instruments that measure conductivity, temperature, and depth (CTDs) to detect active hydrothermal vents. Subsequently, a dense AUV survey would be used to identify inactive and extinct vents, either along exposed fault lines or off axis of the spreading center. After a deposit is found, an ROV would be deployed to collect additional information, including physical samples such as via push core and/or grab. HRG, ROV, and AUV equipment are described in more details below and in Appendix A of the EA.

Table 2. Estimated range of seabed box core and free-fall grab sample stations in the eastern area

Survey	Total Number of Stations in Eastern Area
Course survey using free-fall grab (15-km grid)	567.9 (257.5 to 1,038.2)
Coarse survey using box core (50-km grid)	62.1 (32.1 to 116.2)
Lease area box core survey (10-km grid)	1,353.5 (419 to 3,237.2)
Area of interest box core survey (7-km grid)	565.9 (279.1 to 982.1)
Total	2549.4 (987.7 to 5373.7)

Note: Counts of samples or stations contacting the seafloor are mean values with a range in parenthesis of 5% to 95% the value. Totals are derived from running simulations, and not additive, from the four surveys and explained further in **Appendix A of the EA**.

Table 3. Estimated area of disturbance to the seafloor caused by box core and free-fall grab surveys in the eastern area

Survey	Total Disturbance in Eastern Area (m^2)
Course survey using free-fall grab (15-km grid)	283.9 (117.4 to 544.5)
Coarse survey using box core (50-km grid)	62.1 (28.4 to 121.3)
Lease area box core survey (10-km grid)	1,353 (390.2 to 3,305.7)
Area of interest box core survey (7-km grid)	565.9 (279.1 to 982.1)
Total	2,264.9 (815.1 to 4,953.6)

Note: Area of disturbance to the seafloor are the mean values with a range in parenthesis of 5% to 95% the value. Totals are derived from running simulations, and not additive, from the four surveys and explained further in **Appendix A** of the EA**.**

In the western area, BOEM assumes multiple seafloor sampling efforts by ROV. This assumed approach maximizes the number of sampling sites (i.e. potential deposits) and samples; therefore, the maximum anticipated environmental impact. The number of sites and samples are estimated from research-based activities, U.S. agency research, and 2023 ISA guidance with details available in Appendices A and E of the EA. BOEM estimates there may be up to 241 deposits in the western area. In Table 4, BOEM estimates one ROV survey per lease would be

completed for the undertaking, collecting approximately 30 samples per deposit. Together, these surveys could disturb 13,586 m^2 of the seafloor and represent approximately 0.000010% of the total western area.

Table 4. Estimated range of number of seabed ROV samples and area of seafloor disturbance in the western area

ROV Sampling Method	Number of Samples per Deposit	Total Disturbance in Western Area (m^2)
Push core	10 (5 to 15)	4,529.4 (13,89.1 to 11,135.5)
Grab	20 (10 to 30)	9,056.6 (2,771.8 to 22,129.1)
Total	30 (15 to 45)	13,586 (4,160.9 to 33,264.6)

To the extent historic properties may exist but have not yet been identified or discovered, in the eastern area, BOEM is planning to ensure that a QMA visually examines retrieved box core and free fall grab samples for potential cultural material and artifacts and the cores and samples are photo-documented prior to sub-sampling. Bottom imagery (e.g., video or still systems with lights) may also be acquired as technically feasible for seabed disturbance or sampling activities. All imagery will be retained and provided for review by a QMA to determine if any potential archaeological resources were present in the sampled areas. In the western area, BOEM plans to require as a lease stipulation that a QMA monitor the video feed in real time if a ROV survey is conducted near a potential or newly discovered archaeological resource.

Underwater Transponder Positioning Units, Buoys, Moorings, and Landers

Ocean environmental characterization surveys utilize anchors, clump or ballast weights, and placement of scientific equipment on the seafloor. Weights and some equipment are considered expendable and left on the seafloor, while the connected equipment is released and retrieved. Sediment plumes are a known concern from commercial-scale mining, and a common way to understand ocean sedimentation and currents is to anchor sampling devices on or near the seafloor. AUVs may also require the use of multiple navigation devices positioned on the seafloor. During preliminary activities, a Lessee would likely include placement of sampling devices and associated anchors to position those devices on the seafloor.

In the western area, preliminary activities that contact the seafloor, such as placing anchors, require prior visual clearance and controlled placement of equipment. Sediments and substrates on the western side are expected to be more variable and contain hard-bottom or consolidated sediments, which may be sensitive to disturbance. Therefore, any equipment on the seafloor must be placed precisely where imagery, or other clearance methods, has determined there would be no notable adverse impact. Due to expansive soft sediments expected in the eastern lease areas, the same procedures are not required, although recommended where feasible.

Surface buoys are anchored at fixed locations for monitoring and evaluating water column and air conditions. In deeper waters, Lessees are more likely to set moorings for collecting oceanographic data without a surface buoy (AMC Consultants Pty Ltd et al. 2021). However, BOEM estimates two large surface ocean buoys would be placed per lease; the undertaking could have a maximum of 12 buoys. Likely buoy types for deep water include discus-shaped, boat-shaped, and spar buoys; a large discus-shaped hull buoy has a circular hull of 10–12 m in diameter. Meteorological buoys are the most common type of larger ocean buoy deployed. Meteorological buoy anchors deployed create a buoy watch circle (i.e., excursion radius) of approximately 1,250 m and almost 3,000 m of line (Pacific Northwest National Laboratory 2019). Onboard power supply sources for buoys could include solar arrays, lithium or lead-acid batteries, and diesel generators, which require an onboard fuel storage container with appropriate spill protection and environmentally sound methods for refueling activities. Buoys will be lit in accordance with the U.S. Coast Guard (USCG) private aid to navigation (PATON) requirement. Decommissioning to remove the approved equipment is essentially the reverse of the installation process. Installation and decommissioning of buoys are expected to be completed within one day per buoy, and decommissioning likely would be performed with the support of a vessel(s) equivalent in size and capability to that used for installation.

A buoy would be anchored to the seafloor at two or three locations by equipment made from materials such as solid cast iron, cement, or chain. The line connecting the buoy to the anchor consists of chain, jacketed wire, nylon rope, polypropylene rope, and subsurface floats, which keep the mooring line taut to semi-taut, reduce slack, and eliminate looping (National Data Buoy Center 2025). The chain at bottom of the mooring line could sweep and disturb the seafloor. A meteorological buoy anchor deployed a solid cast iron anchor weighing approximately 11,000 lbs. and had a footprint of approximately 2.3 m^2 (Pacific Northwest National Laboratory 2019). Anchors range from 3,700-6,800 lbs., with similar types of mooring lines extending approximately 500 m below the surface to avoid interference with other marine activities (Sharma and Nath 2020; AMC Consultants Pty Ltd et al. 2021; China Minmetals Corporation 2024; National Data Buoy Center 2025). BOEM estimates that mooring installation could disturb approximately 28 m^2 of seafloor per mooring (Appendix A of the EA). After installation, the transport vessel likely would remain in the area for several hours while technicians configure systems.

The speed and direction of ocean currents would likely be assessed with ADCPs. An ADCP is a remote sensing technology that transmits sound waves at a constant frequency and measures their reflection as the waves ricochet off fine particles or zooplankton suspended in the water column. ADCPs could be mounted independently on the seafloor, attached to a buoy, or have multiple instruments deployed as a subsea current mooring. A seafloor ADCP likely would be mounted in a tripod or a trawl resistant mount. One subsea current mooring might have 8–10 ADCPs vertically suspended from an anchor, combined with several floats made of syntactic foam. These moorings do not breach the surface. A typical ADCP is about 1–2 ft tall and 1–2 ft wide. Its mooring, base, or cage (surrounding frame) would be several feet wider. BOEM estimates that eight moorings per lease could be installed across all lease areas, with seafloor disturbance likely around 28 (12.6 to 78.5) m^2 per mooring.

Preliminary activities in eastern CNMI waters may include a seafloor lander. This stationary scientific monitoring device 'lands' on the seafloor and ranges in size. BOEM assumes approximately 22 landers could be deployed across the total area but not at the same time. Most landers would displace about 2 m^2 of seafloor, though the footprint of a newer device rated to ocean depths of 6,000 m is approximately 4 m^2 (Guo et al. 2023).

As a part of the undertaking, the EA also assumes AUV-based surveys would use multiple AUVs and require placement of Underwater Transponder Positioning (UTP) units on the seafloor. Each UTP could displace 1 m^2 of area, with up to 405 UTPs placed across the eastern area (Table 5) and 1,472 UTPs in the western area (Table 6). Leases in the eastern area likely would have one HRG AUV survey. Leases in the western area would likely have an additional denser AUV survey.

Table 5. Estimated area of disturbance to the seafloor caused by deploying equipment and moorings for data collections within leases in the eastern area

Survey	Disturbance per Lease (m^2)	Total Disturbance for Eastern Lease Areas (m^2)
UTP deployment for AUV survey	134.9 (67.4 to 239.4)	404.7 (202.2 to 718.2)
Moorings for equipment	186.7 (95 to 303.8))	560 (285 to 911.3)
Landers	7.3 (5 to 9.6)	21.9 (15.1 to 28.8)
Total seafloor disturbance	328.9 (167.4 to 552.8)	986.6 (502.3 to 1658.3)

Note: Any value that has a range is described as the mean value (5% to 95%) value. Totals are derived from running simulations, and not additive, from the three efforts and explained further in **Appendix A in the EA**.

Table 6. Estimated area of disturbance to the seafloor caused by deploying equipment and moorings and landers for data collections within leases in the western area

Survey	Disturbance per Lease (m^2)	Total Disturbance for Western Lease Areas (m^2)
UTP deployment for AUV survey	498.8 (269.8 to 757.8)	1471.6 (794.9 to 2,229.9)
Moorings for equipment	183 (93.1 to 297.8)	549 (279.4 to 893.3)
Landers	7.2 (4.9 to 9.4)	21.5 (14.8 to 28.2)
Total seafloor disturbance	689 (367.8 to 1,065)	2,041.5 (1,044.1 to 3,151.4)

Note: Any value that has a range is described as the mean value (5% to 95%) value. Totals are derived from running simulations, and not additive, from the three efforts and explained further in Appendix A in the EA.

To the extent historic properties may exist but have not yet been identified or discovered, bottom imagery (e.g., video or still systems with lights) may be acquired as technically feasible for seabed disturbance or sampling activities. The Lessee will ensure a QMA will review all imagery to identify if any potential archaeological resources are present in the sampled areas. The Lessee

will follow unanticipated discovery protocols in the event of a discovery and/or inadvertent effect.

Remotely Operated Vehicles

The most precise method to collect seafloor sediments or species is by ROV, which can target samples to within a centimeter and provides real-time operational and visual control. BOEM plans to require as a lease stipulation that a QMA must monitor the video feed in real time if a remotely operated vehicle (ROV) survey is conducted near a potential or newly discovered archaeological resource.

Area of Potential Effects

As defined in 36 CFR § 800.16[d], the Area of Potential Effects (APE) is the geographic area, or areas, within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The dimensions of the APE are influenced by the scale and nature of an undertaking and may differ for various kinds of effects caused by the undertaking.

The APE for this undertaking encompasses the full horizontal and vertical extant of the seafloor that could be affected by seafloor- or bottom-disturbing preliminary activities. It includes all portions of the seafloor where such activities may affect historic properties, should they be present. Accordingly, the APE is defined as the entirety of the lease areas (Figure 1).

BOEM has not included any onshore areas within the APE for potential visual effects. Although preliminary activities may include the temporary placement of surface buoys within lease areas these buoys are not expected to be visible from shore or result in effects to onshore historic properties.

Any increased lighted vessel traffic associated with preliminary activities would be temporary and indistinguishable from existing vessel traffic. The minor and short-term increase would not alter existing visual conditions nor is there any indication that this undertaking would involve expansion of existing port infrastructure. Accordingly, the APE for this undertaking does not include onshore areas.

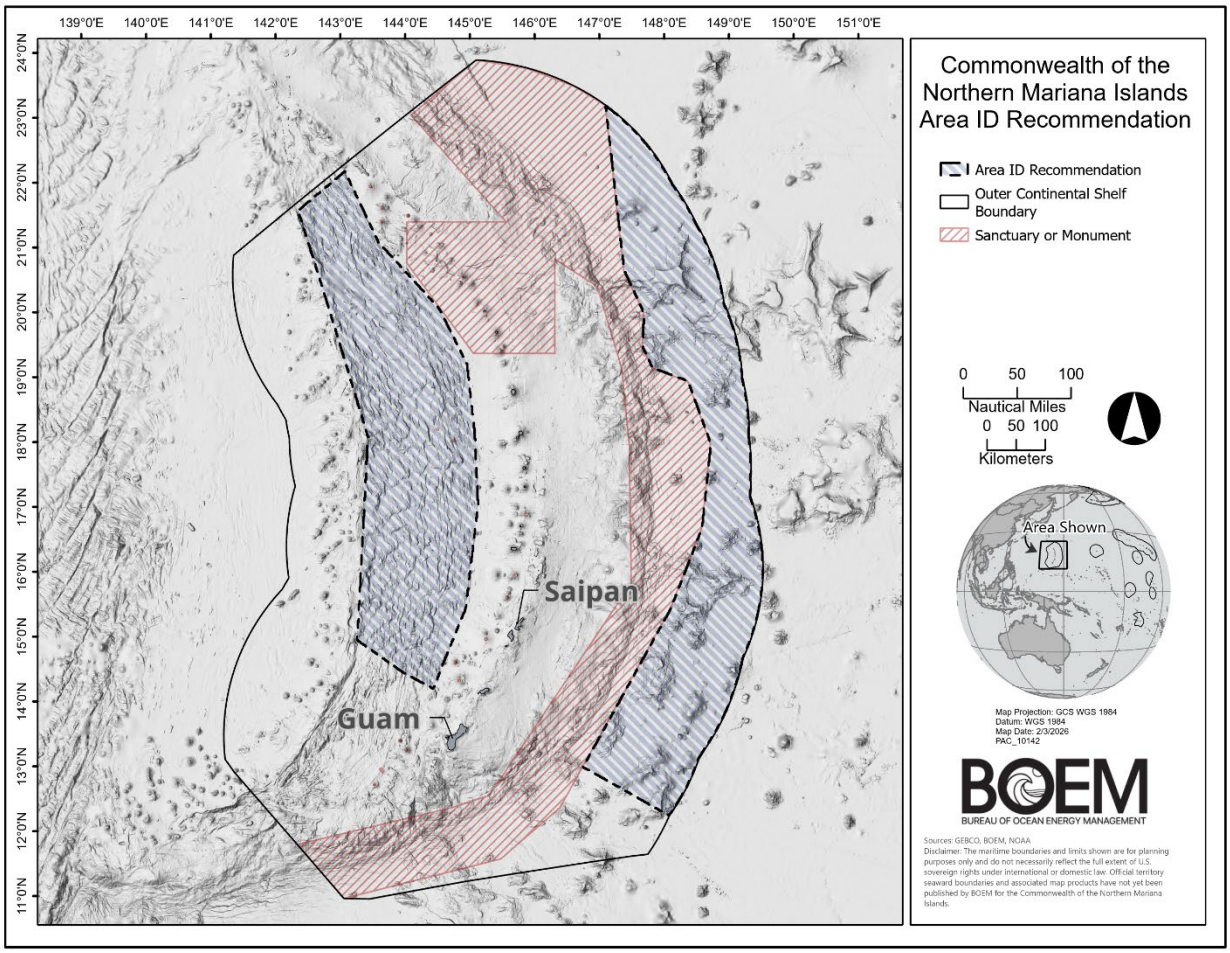


Figure 1. Commonwealth of Northern Mariana Islands Commercial Lease Section 106 NHPA Area of Potential Effects Map

Consultation with Consulting Parties and Public Involvement

On November 12, 2025, BOEM published a request for information and interest to hold a commercial lease sale for marine minerals within the OCS east of the CNMI (Federal Register Doc. BOEM-2025-0351) for a 30-calendar day public comment period. On Friday, Dec. 12, BOEM extended the comment period until Jan. 12, 2026, in response to a request from the Governors of the CNMI and Guam. Subsequently, the lease area was expanded to include an area west of CNMI. On March 16, 2026, BOEM's Acting Director signed the Area Identification Memorandum (Area ID) delineating an Eastern Area and a Western Area totaling approximately 69,101,413 acres (279,643 km^2) with water depths ranging from 2,820 - 25,100 feet (860 - 7,650 meters).

BOEM initiated consultation through letters, sent via email, with the CNMI Historic Preservation Officer, the Guam Historic Preservation Officer, Mariana Islands National Wildlife Refuge and Mariana Trench Marine National Monument (USFWS and NOAA), War in the Pacific National Historical Park (Guam) and American Memorial Park (Saipan) (NPS), and additional consulting parties including other federal agencies, the University of Guam, Northern Marianas College,

and the Matua Council for Native Chamorro Advancement (Attachment A, attached hereto). Consulting parties were invited to provide comments and information to assist in identifying historic properties and in evaluating the potential effects of the undertaking on those properties. NOAA's Office of National Marine Sanctuaries responded that they do not manage any sanctuaries in this area and did not want to be a consulting party to this undertaking.

BOEM shared this draft Finding with all the consulting parties listed in Attachment A for a 30-calender day review period. BOEM requested concurrence on the draft Finding from the CNMI Historic Preservation Officer and the Guam State Historic Preservation Officer and invited comments from all consulting parties. Further, BOEM posted this draft Finding on BOEM's webpage to seek public comment. BOEM received comments from the Naval History and Heritage Command noting the importance of referencing the Sunken Military Craft Act in the EA and the Finding. BOEM references the Sunken Military Craft Act in the EA under Section 3.13.1 and Appendix F and the Finding, in particular notes certain historic properties would be protected under the Sunken Military Craft Act. BOEM received comments from the Bureau of Safety and Environmental Enforcement regarding the FOE, and BOEM incorporated these recommended edits where applicable. The U.S. Army Corps of Engineers, Honolulu District accepted the invitation to be a consulting party and did not provide any comments. BOEM received comments from the Defense POW/MIA Accounting Agency regarding reported lost military vessels and aircraft within the APE. BOEM received comments from the Matua Council for Native Chamorro Advancement objecting to the Finding noting concerns with BOEM's Section 106 NHPA review process and the definition of the undertaking. BOEM disagrees with the comments from the Matua Council for Native Chamorro Advancement. BOEM did not receive any comments from the CNMI or Guam Historic Preservation Offices.

BOEM posted the final Finding on BOEM's webpage.

II. Description of the Steps Taken to Identify Historic Properties

BOEM has determined that separate Section 106 consultations, including the identification and evaluation of historic properties, assessment of effects, and, if necessary, the resolution of adverse effects will be conducted at different stages of this leasing. This Section 106 consultation addresses potential effects associated with the issuance of leases including implementation of allowable preliminary activities after lease issuance. Should one or more leases be issued and activities be proposed beyond preliminary activities, BOEM will conduct separate Section 106 consultations, as appropriate, prior to approval/approval with conditions or disapproval of Delineation, Testing, and/or Mining Plans.

Based on the nature and scale of this undertaking (issuing commercial leases and subsequent preliminary activities) with no or minimal potential to affect historic properties, BOEM determined that the agency meets the reasonable and good faith effort requirements for the identification and evaluation of historic properties through the evaluation of existing databases, reports, and regional studies identifying potential or nonpotential historic properties and consultation with the CNMI Historic Preservation Officer, the Guam Historic Preservation Officer, and other consulting parties. BOEM reviewed existing and available information regarding historic properties that may be present within the APE, including data concerning possible historic properties not yet identified.

BOEM reviewed the most recently updated, publicly available National Register of Historic Places (NRHP) database information. As of June 24, 2025, CNMI contains 39 listed historic properties and Guam contains 135. Of these, three properties in CNMI and one property in Guam are designated National Historic Landmarks. None of these historic properties are located within the APE for this undertaking.

BOEM conducted a review of reported shipwrecks in BOEM's Pacific OCS Shipwreck Database. BOEM's Pacific OCS Shipwreck Database does not represent a complete listing of all potential shipwrecks on the Pacific OCS but, rather, serves as a baseline source of existing and available information for the purposes of corroborating and supporting identification efforts. Analysis of this BOEM database and other shipwreck databases reviewed is discussed later in this report, specifically the Post-Contact Period Cultural Resources subsection below. A BOEM and NOAA sponsored May 2025 research cruise, the Mattingan Marianas Arc Volcanic Exploration, acquired survey, ROV, and AUV data from within the eastern and western lease areas. BOEM determined available multibeam data collected in the lease areas have been acquired using hull-mounted multibeam sources. However, object detection on the seafloor remains a technical challenge given the extreme water depth and precision/accuracy inherent in using surface acoustic data. Even though there is multibeam data of certain sections of the proposed lease areas, the horizontal and vertical resolution of the available multibeam data is not suitable for the purpose of historic property-specific identification.

To date, the APE has not been subject to a complete and comprehensive archaeological identification survey. Contributions from regional and area cultural and archaeological studies are included in this report (Carrell et al. 1991, BOEM 2017 and 2024, Van Tilburg 2007), as are cultural resource studies or surveys specific to CNMI (Carrell 2009a, McKinnon et al. 2015, McKinnon and Carrell 2015, and others). However, there has not been an archaeological survey of the eastern or western lease areas. The following sections outline the history of human habitation in CNMI through several time periods and discuss the potential cultural resources that may be discovered within the lease areas.

Pre-Contact Period (approximately 1500 Before Common Era [BCE] to 1521 Common Era [CE])

Based on the present understanding of the archaeological record, human populations-settled in the CNMI by 1500 years BCE, after completing the world's longest open-ocean voyage in human history at its time, more than 2,000 km from any contemporary populated area (Carson 2014). At this time, sea levels were significantly higher (up to 2m above current levels), with drawdown not occurring until approximately 1100 BCE. Habitation sites and permanent settlements related to the earliest occupation by the *CHamoru* (Chamorro) people were limited to few locations and included post-raised houses with heated-rock ovens or hearths, located directly at the ancient shoreline and partially extending into the inter-tidal zone. Faunal remains from the earliest settlement sites indicate a diet including shellfish (such as clam, chiton, limpets, and sea urchins), fish, birds, and turtles. Plant-based foods such as coconut, native breadfruit, cycads, and others were obtained through low-impact modifications of the natural forest habitat and small-scale farming. The earliest settlers produced abundant red earthenware pottery, consisting of small, thin-walled vessels (up to 20 cm in diameter) decorated with black burnishing and

occasional use of impressed designs on the exteriors, as well as stamped and incised designs. Personal ornaments were made of shells, as were fishing gear such as hooks, net weights, and lures. Stone tools consisted of both ground and flaked implements made of limestone, chert, and porous volcanic stone (Carson & Hung 2021). This period from 1500 BCE to 1000 CE is referred to as the Pre-Latte Period (Carson 2012).

As sea levels dropped and the *CHamoru* diversified and modified their material cultural and subsistence practices, settlement locations shifted to follow the shoreline and adjusted use of the broadening beaches and interior locations. Some of the largest and most complex were once found in inland areas rather than along coasts (Osborne n.d. in Carson 2012, p.321), suited to farming plants such as yams, taro, bananas, breadfruit, sugar cane, and rice. By 1000 CE the *CHamoru* were building structures supported by upright stone pillars known as *latte*, often consisting of eight pillars in two rows situated with the long axis paralleling a nearby shoreline or stream (Hornbostel n.d. in Carson 2012, p. 317). Most of the archaeological study in the CNMI to date has focused on this period of their history, referred to as the Latte Period (1000-1700 CE), and latte stones remain standing across the islands today as symbols of the deep history of the CHamoru culture. The most impressive of these monumental sites, the House of Taga (built circa 1600), represents the largest ever standing structure of traditional stonework in the Mariana Islands, and has been identified as a multi-component site with the oldest occupational layers beneath and surrounding the pillars dating to the earliest occupation period circa 1500-1300 BCE (Carson & Hung 2021).

Pre-Contact Period Cultural Resources

The APE has no potential for the presence of inundated precontact terrestrial sites because the water depths (2,820–25,100 feet [860-7,650 meters]) are well below the lowest sea levels during human habitation of CNMI. Micronesian watercraft and/or associated artifacts from the Pre-Contact Period or later could, however improbably, exist within the APE. Evidence of pelagic species in the archaeological record indicates that communities in CNMI fished the open ocean throughout the precontact period (Amesbury 2013). However, Micronesian shipwrecks are extremely unlikely to be encountered mostly because of their inherent buoyancy. The Pacific voyaging canoe may have originated in the deep past in Indonesia or the Philippines and spread through the Pacific (Horridge 1995:135-142). Pacific voyaging canoes used a double-hull design to achieve stability, instead of the use of ballast (Haddon and Hornell 1936). As a result, "Submerged wreck sites (unintentional or accidental losses while in-use) for voyaging canoes may therefore be very rare, if they exist at all, in the Pacific" (BOEM 2017). CHamoru sailing canoes have yet to be discovered in the archaeological record (Russell 2009:61). So far, the only in-situ voyaging canoes have been discovered at nearshore terrestrial wet sites, instead of oceanic contexts (Sinoto 1983; Johns and Sung 2014; BOEM 2017; BOEM 2024). The likelihood of discovering or encountering artifacts from lost Micronesian watercraft is likewise remote.

Post-Contact Period (1521 CE to Present)

The Post-Contact Period in CNMI can be divided into six sub-periods: Early European Exploration and Spanish Period (1521-1898), German Period (1899-1914), Japanese Mandate (1914-1941), World War II (1941-1945), and postwar (1945-present) (Carrell 2009a). The Post-

Contact Period began when Europeans arrived on voyages of exploration, starting with Magellan in 1521. The Spanish Period resulted in significant social change in CNMI, especially with the late seventeenth century Spanish removal of all CHamorus from the northern islands to Saipan, Guam, and Rota. This forced relocation caused a shift of lifeways, resulting in a loss of CHamoru maritime knowledge, including the use of indigenous sailing watercraft (Brunal-Perry et al. 2009). The population of CNMI declined during this period because of disease and forced relocation (de la Rosa 2019). After more than three centuries of Spanish rule, the United States acquired control of Guam in 1898 during the Spanish-American War, and Germany purchased the CNMI from Spain in 1899 (Spennemann 2007:7-8) The German colonial period lasted until 1914, when the Japanese seized the islands during World War I. Under the Japanese Mandate trade increased, sugar production and fishing expanded, and CNMI experienced an influx of Japanese, Okinawan, and Korean immigrants (Peattie 1988; Ombrello 2009). Although tensions between the United States and Japan over Micronesia were largely resolved in the interwar period, World War II brought both nations into direct conflict in the Pacific. Japan seized Guam at the onset of hostilities. As the war progressed, US military strategists recognized the capture of CNMI as key to cut off Japanese shipping, reinforcement, and supply routes as well as to secure strategic air bases for campaigns against the Japanese mainland (Morison 1963:325; Farrell 2009:297). The US invasion of CNMI, especially the battles for Saipan and Tinian, caused massive loss of life on the islands, both military and civilian (Sheeks 1945). After capture, the airstrips on Tinian served as the staging area for bombing runs to Japan, culminating in the use of atomic weapons on Hiroshima and Nagasaki in 1945 (Clapson 2019). After World War II, CNMI remained a United States trust territory after World War II and is now a United States unincorporated territory and commonwealth.

Post-Contact Period Cultural Resources

Similar to Van Tilburg's assessment of American Samoa, the cultural resources of CNMI can be divided into five aspects: historic shipwrecks; lost World War II aircraft; World War II fortifications; terrestrial archaeological sites; and "marine/coastal natural resources associated with the legends and folklore" (Van Tilburg 2007). Based on the information available at this stage of early leasing, BOEM has determined that shipwrecks and downed aircraft are the most likely types of cultural resources to be encountered in the APE, given its water depth and distance from land. BOEM understands that Pacific Islanders place a deep cultural significance to the ocean itself and through consultation may determine if these lease areas or certain portions are culturally significant to specific communities. There are three Traditional Cultural Places (TCPs) on Tinian (US Department of the Navy 2026), and none in the APE.

Seafaring has characterized CNMI for millennia. Consequently, shipwrecks could be found within the APE and could reflect a variety of vessel types and time periods. Research suggests at least 147 reported vessel losses in CNMI and Guam, with locations for at least 72 vessels, several of which have been found (Carrell 2009b:353). Although no submerged archaeological sites are currently confirmed in the APE, historical records report vessels as having been lost within the lease areas, especially the western lease area. Twelve Japanese vessels were reported lost during World War II within the APE, including merchant marine transports, submarines, a gunboat, a repair ship, and a fleet tanker (Carrell 2009b). Military vessels and aircraft, whether American or Japanese, are protected under the Sunken Military Craft Act (SMCA 2004), and may also be submerged grave sites. The potential presence, and potential dangers, of unexploded

ordinance should also be considered at submerged World War II-era archaeological sites (Raupp et al. 2015:45)

In consultation with other federal partners, BOEM marine archaeologists searched multiple databases and contacted other federal agencies (Automated Wreck and Obstruction Information System, BOEM's Pacific OCS Shipwreck Database, United States Naval History and Heritage Command, and Defense POW/MIA Accounting Agency) and received reports of missing vessels and aircraft. The USNHHC reported three US Navy shipwrecks and four US Navy aircraft wrecks in the APE.

Although no identified historic properties have been investigated in the APE at this time, BOEM considered details particular to deepwater environments that could affect the preservation of potential archaeological sites. These conditions are described in the following information, excerpted from BOEM 2017 and BOEM 2024: "In extreme water depths, burial, survival, and preservation of a wreck warrants close consideration. Burial is extremely unlikely at the water depths in the APE owing to very low sedimentation rates and quiescent bottom conditions typically found in open ocean, deepwater settings. Despite low sedimentation, conditions may also be anoxic or feature low oxygen levels that could enable preservation of wooden shipwrecks. In comparison, if there are sufficient oxygen levels (or dark oxygen), organisms that depend on organic material may destroy wooden hulls. Preservation of non-wooden shipwrecks would similarly depend on conditions at the site. However, if a wreck is found with sufficient diagnostic artifacts in concentration, the older wooden shipwreck site may possibly be eligible for NRHP inclusion as an archaeological site (artifact concentration) rather than relatively intact wreck or discrete object (NHPA 1966)."

Aviation losses around CNMI during WWII were substantial. Numerous aircraft have been documented in both the historic and archaeological records, especially nearshore (McKinnon 2015). Although archaeological research has been conducted in the waters off CNMI to depts of 370 m (Lickliter-Mundon 2018), no aircraft have been investigated within the lease areas to date. As with military watercraft, military aircraft are protected by the Sunken Military Craft Act of 2004.

Due to the lack of survey information in this area of the Pacific Ocean, the potential for the presence of submerged historic sites, consisting of shipwrecks, downed aircraft, or other cultural resources remains largely unknown. Leasing stipulations and best management practices will require the Lessee to avoid any known historic properties if present, to ensure a QMA is involved in specific surveys and inspections of samples, to conduct visual examination with video recording of box core and free-fall grab samples collected during preliminary activities, to implement specific high-resolution geophysical survey methodology and reporting of survey results, and to conduct unanticipated discovery protocols in the event of a discovery or unanticipated effect.

III. Leasing Requirements

Where practicable, BOEM expects to require avoidance of potential historic properties through lease stipulations, resulting in BOEM recording a Finding of No Historic Properties Affected,

consistent with 36 CFR § 800.4(d)(1). Inclusion of the elements outlined below in the lease would help ensure the identification and avoidance of historic properties; their inclusion is a requirement of this Finding.

The following elements, designed to avoid impacts to offshore historic properties from bottom-disturbing activities associated with preliminary activities, are proposed to be included in the commercial leases associated with the OCS offshore CNMI:

- No Impact without Approval:

  In no case may the Lessee knowingly impact a potential archaeological resource without the Lessor's prior consent, following appropriate compliance with the National Historic Preservation Act.

- Qualified Marine Archaeologist:

  The Lessee must ensure that its QMAs meet the Secretary of the Interior's Professional Qualifications Standards listed in 48 *Federal Register* 44738–44739.

- Preliminary Activities – Archaeology Requirements:

  The Lessee must ensure a QMA visually examines retrieved box core and free fall grab samples for potential cultural material and artifacts and photo-documents cores and samples prior to sub-sampling. The Lessee, if technically feasible, will acquire bottom imagery from seabed disturbance or sampling activities. The Lessee will ensure the QMA reviews all imagery to identify if any potential archaeological resources are present in the sampled areas.

  - The QMA must monitor the video feed in real time if a remotely operated vehicle (ROV) survey is conducted near a potential or newly discovered archaeological resource.
  - Review and monitoring by the QMA may be conducted remotely only if images and video feed are of sufficient quality.
  - If during examination of the retrieved seabed samples and/or during visual imaging\ the Lessee determines that a potential marine cultural resource may have been located or affected, the Lessee will initiate the steps outlined in the Unanticipated Discovery requirements.

In addition, BOEM is expected to require that the Lessee observe the "unanticipated discovery" requirements in the Section 106 NHPA regulations (36 CFR 800.13[a]). The following elements are being proposed for inclusion in the commercial leases that may be issued within the OCS offshore CNMI:

Unanticipated Discovery Clauses:
While conducting activities, if the Lessee discovers an unanticipated potential archaeological resource, such as the presence of a shipwreck site (e.g., a sonar image or visual confirmation of

an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of historic objects, piles of ballast rock) or evidence of a pre-contact archaeological site (e.g. stone tools, pottery or other pre-contact artifacts) within the Lease Area, the Lessee must:

- Immediately halt seafloor-disturbing activities in the area of a distance of 1000 feet (305 meters) from the discernible extent of the target;
- Notify the Lessor within 24 hours of discovery;
- Submit to the Lessor a written report on details of the discovery within 72 hours of its discovery written by a QMA that meets the Secretary of the Secretary of the Interior's Professional Qualifications Standards listed in 48 *Federal Register* 44738–44739;
- Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the Lessor has made an evaluation based on analysis and recommendations from the QMA and instructs the Lessee on how to proceed; and
- If (1) the site was impacted by the Lessee's project activities; or (2) impacts to the site or to the area of potential effects cannot be avoided, the Lessee must conduct additional investigations overseen by a QMA, as directed by the Lessor, to determine if the resource is eligible for listing in the National Register of Historic Places (30 CFR 585.802[b]).If the Lessee's investigations indicate that the resource is potentially eligible for listing in the National Register of Historic Places, the Lessor will inform the Lessee how to protect the resource or how to mitigate adverse effects to the site. If the Lessor incurs costs in protecting the resource, then, under section 110(g) of the National Historic Preservation Act, the Lessor may charge the Lessee reasonable costs for carrying out preservation responsibilities under the Outer Continental Shelf Lands Act.

<u>Marine Archaeological Survey Protocols and Details</u>

These survey protocols and details are included in the CNMI Information to Lessees document.

- <u>Archaeological Survey Required for Delineation, Testing and Mining Phases:</u> The Lessee must conduct and provide the results of an archaeological survey with submission of any of its plans (Delineation, Testing, and/or Mining Plan). The archaeological survey report must include a description of the methods used to conduct the archaeological surveys in support of the submitted plan or plans (i.e., Delineation, Testing, and/or Mining Plan). The Lessee must follow these marine archaeology survey requirements prior to, during, and after submittal of the archaeological survey results to BOEM.
    - The Lessee will have to complete a marine archaeology survey plan and conduct a pre-survey meeting. The Lessee will coordinate with BOEM before conducting survey activities through both the preparation and submission of a survey plan and participation in a pre-survey meeting with BOEM. The Lessee should include appropriate historic preservation staff and marine archaeologist(s) both in the preparation of the survey plan and as participants in the pre-survey meeting.
    - The Lessee will provide a detailed description of the activities proposed in their plans (Delineation, Testing, and/or Mining Plan) including a description of the potential Area of Potential Effects (APE). The geographic area, or areas, in which these proposed activities take place is the APE. The scope of these geographic

areas should include the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities.

- The Lessee will conduct the archaeological survey of the lease area(s) by employing high-resolution geophysical (HRG) survey techniques prior to conducting seafloor disturbing activities not assessed in BOEM's Finding of No Historic Properties Affected for the Issuance of Minerals Leases on the Outer Continental Shelf Offshore CNMI.
- High-resolution Geophysical Survey Techniques: The areas surveyed for archaeological identification purposes must be large enough to cover all portions of the project area affected by the activities proposed, including all seafloor-disturbing activities, whether temporary or permanent. The survey will include 100% seafloor coverage using side scan sonar (SSS), and/or multibeam echo sounder (MBES), prior to bottom disturbing activities in the Testing and Mining phases. The SSS/MBES instrument range must be set to provide at least 100 percent overlapping coverage (i.e., 200% seafloor coverage). This coverage must ensure 0.5 m resolution or better of the seafloor.
- The Lessee will be required to submit the results of the archaeological survey(s) in a final report. The report will be a stand-alone document submitted with the Lessee's Delineation, Testing, and/or Mining Plan. The report must provide an evaluation and synthesis of the data (including desktop research and HRG survey) for the purpose of identifying potential archaeological resources in the lease areas. The report and analyses presented therein must be prepared by a QMA. The report will describe the activities proposed in the plan, the area(s) that may be affected by the proposed activities, the methods of identifying archaeological resources within those areas, and the results of those identification efforts.
- The Lessee will be required to submit digital data including the following:
    - Navigation Data: The navigation post-plot of the surveyed area(s) including survey lines, line numbers or other designations, navigational shot points or event markers, and other relevant attributes should be submitted in an ArcGIS readable format (e.g., Microsoft Excel (.xls), Comma separated value (.csv), Text file (.txt), Database (.dbf) or Shapefile (.shp).
    - Proposed Project: The location of the proposed project elements, including relevant attributes, should be submitted in an ArcGIS readable format (e.g., Microsoft Excel (.xls), Comma separated value (.csv), Text file (.txt), Database (.dbf) or Shapefile (.shp).
    - Side scan sonar: The information used to create the table of side scan sonar contacts and charting of sonar contacts should be submitted in an ArcGIS readable format (e.g., Microsoft Excel (.xls), Comma separated value (.csv), Text file (.txt), Database (.dbf) or Shapefile (.shp). The following attributes should be included: Side scan sonar contact ID; Lease block; Survey line number; Target length (m); Target width (m); Target height (m); Target shadow (m); Target description; Associated magnetic anomalies (if any); coordinates of the target in decimal degrees to 5 decimal places; Original source file name; and recommended avoidance distance, if applicable. Applicants must provide both raw and renavigated

(if available) files for the survey in the side scan manufacturer's native format, at the side scan's native sample rate (not resampled). Side scan sonar mosaics of the survey area must be prepared as a geo-referenced Tagged Image Format (.tif) and output as 0.5 m resolution or better.

- Multibeam Echosounder (MBES): The information used to create the table of MBES contacts and charting of sonar contacts may be submitted in an ArcGIS readable format (e.g., Microsoft Excel (.xls), Comma separated value (.csv), Text file (.txt), Database (.dbf) or Shapefile (.shp). The following attributes must be included: MBES contact ID; Lease block; Survey line number; Target length (m); Target width (m); Target height (m); Target description; Associated magnetic anomalies (if any); coordinates of the target in decimal degrees to 5 decimal places; Original source file name; and recommended avoidance distance, if applicable. Applicants must provide both raw and renavigated (if available) files for the survey in the MBES manufacturer's native format. MBES bathymetry and backscatter grids of the survey area must be prepared as a geo-referenced Tagged Image Format (.tif) and output as 0.5 m resolution or better.
- Bathymetry Data: The Lessee may provide bathymetric data in one of the following formats with appropriate metadata detailing processing parameters, illumination angles and coordinate systems: XYZ data; ARC ASCII Grid and layer files; Contours (ESRI compatible); and Geo-referenced image files.

- Pre-Survey Meeting: The Lessee must coordinate a pre-survey meeting associated with archaeological surveys conducted to support plan (Delineation, Testing, and/or Mining Plan) submittal by sending an email and following up with email or phone calls as necessary, to the following parties: BOEM, CNMI and Guam Historic Preservation Officers and Underwater Archaeology Branch - Naval History and Heritage Command.

    - The purpose of this meeting will be for the Lessee, the Lessee's QMA, and other pertinent personnel to discuss the Lessee's Survey Plan and consider requests by the party attendees to monitor portions of the archaeological survey and the geotechnical exploration activities, including the visual logging and analysis of geotechnical samples (e.g., cores). Notification of the pre-survey meeting must be sent at least 15 calendar days prior to the date of the proposed pre-survey meeting. The meeting must be scheduled for a date at least 30 calendar days prior to commencement of survey activities performed in support of plan submittal and at a time that affords the participants a reasonable opportunity to participate. The anticipated date for the meeting must be identified in the timeline of activities described in the applicable marine archaeology survey plan. The Lessee must provide the Lessor with documentation of compliance with this stipulation prior to commencement of surveys.

- Geotechnical Exploration: The Lessee must adhere to the preliminary activities archaeology requirements. With the exception of box core and free fall grab samplers, the

Lessee may only conduct geotechnical exploration activities performed in support of its plan(s) submittal (i.e., Delineation, Testing, and/or Mining Plan) in locations where an analysis of the results of geophysical surveys has been completed. This analysis must include a determination by a QMA as to whether any potential archaeological resources are present in the area. The geotechnical exploration activities must avoid potential archaeological resources by a minimum of 1000 feet (305 meters), and the avoidance distance must be calculated from the maximum discernible extent of the archaeological resource. A QMA must certify, in the Lessee's archaeological survey report, that geotechnical exploration activities did not impact potential historic properties identified as a result of the HRG surveys performed in support of plan submittal. In the event that the geotechnical exploration activities are found to have impacted potential historic properties, the Lessee must follow the Unanticipated Discovery lease stipulation.

Monitoring and Avoidance: The Lessee must ensure a QMA is present (this can be conducted virtually if the information is conveyed in sufficient quality and in real time to give their professional guidance) during bottom-disturbing activities performed during preliminary activities and in support of plan submittal (i.e., Delineation, Testing, and/or Mining Plan) that occur in areas near a potential archaeological resource or occurring in areas that have not been sufficiently surveyed with high-resolution surveys to ensure avoidance of potential archaeological resources.

IV. The Basis for the Determination of No Historic Properties Affected

This Finding is based on a review of existing and available information conducted by BOEM, consultation with interested and affected parties, stipulations outlined in the required elements of a lease, and conclusions drawn from this information. The proposed undertaking includes the issuance of up to six commercial leases within the OCS offshore CNMI and takes into account the execution of associated preliminary activities. The proposed bottom-disturbing activities located in the APE are in extremely deep water (>2,820 feet, 860 m water depth) in a remote location where BOEM has information that historic properties exist.

Preliminary activities allowed with lease issuance (i.e., the collection of box core and free fall grab samples and the deployment of UTPs, moorings, landers, and scientific equipment) have minimal potential to adversely affect a historic property if present. BOEM will require the Lessees to avoid known or potential historic properties and ensure a QMA is allowed to monitor or review live-stream video or recordings and/or samples during certain seafloor disturbing activities. In the event of a discovery or inadvertent effect the Lessee(s) will follow the established unanticipated discovery protocols. Therefore, no historic properties will be affected for the undertaking of issuing up to six commercial lease(s) within the OCS offshore CNMI, consistent with 36 CFR 800.4(d)(1).

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Attachment A: Section 106 National Historic Preservation Act Consulting Parties List

Agency/Organization	Point of Contact
Federal Government Agencies	
***Bureau of Safety and Environmental Enforcement (BSEE)**	Doug Jones Barry Bleichner
National Oceanographic and Atmospheric Administration (NOAA) Maritime Heritage Program	William Hoffman Jessica Kondel
National Park Service (NPS) War in the Pacific National Historical Park (Guam) and American Memorial Park (Saipan)	Barbara Alberti
***U.S. Army Corps of Engineers** **Regulatory Division, Guam Field Office, Honolulu District**	Jason Brewer
***U.S. Department of the Navy** **Naval History and Heritage Command, Underwater Archaeology Branch**	Bradley Krueger Alexis Catsambis
***U.S. Department of War** **Defense POW/MIA Accounting Agency**	Kelley Esh Kyle Bracken
U.S. Fish and Wildlife Service (USFWS) Maraina Trench Marine National Monument and Mariana Islands National Wildlife Refuge	Sean MacDuff Jihan Younis
Commonwealth of the Northern Mariana Islands Government Agencies	
Historic Preservation Office	Mertie Kani
Guam Government Agencies	
Guam Historic Preservation Office	Patrick Q. Lujan

Other Potentially Interested Parties

University of Guam	William Jeffery, PhD.
Northern Marianas College	Deleon Guerrero, EdD
***Matua Council for Native Chamorro Advancement**	**Liana M.S. Hofschneider** **Richard Untalan Hofschneider**

* Accepting parties are indicated in bold with an asterisk.